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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY, DOCKET NO.	CONFIRMATION NO.
09/539,638	03/30/2000	Hong Jiang	10559/158001/P8137	8467

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EXAMINER

LEE, Y YOUNG

ART UNIT PAPER NUMBER

2613

DATE MAILED: 05/22/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

501

Office Action Summary

Application No.

09/539,638

Applicant(s)

Hong Jiang et al

Examiner

Y. Lee

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2613



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 9/7/00 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The following title is suggested: "Video Processing of a Quantized Base Layer and One or More Enhancement Layers".

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 3, 4, 10, 11, and 15-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 3, 10, 16, and 22 recite the limitation "the coefficients of the higher-frequency terms" in lines 3-4, 4-5, 3-4, and 4-5, respectively. There is insufficient antecedent basis for this limitation in the claims.

7. Claims 15, 21, and 27 recite the limitation "the source video sequence" in lines 6, 8, and 6, respectively. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al (5,818,531).

Yamaguchi et al, in Figures 1, 4, 5, 7, 12, and 13, discloses a video encoding and decoding apparatus that is the same article comprising a computer-readable medium 1001 which stores computer-executable instructions for encoding a video sequence of pictures 10 as specified in claims 1-30 of the present invention, comprising a lossy encoder (e.g. Fig. 1) capable of generating a first body of data (Base Layer) sufficient to permit generation of a viewable video sequence of lesser quality than is represented by the source video sequence 10, generating a

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second body of data (Enhancement Layer) being sufficient to enhance the quality of the viewable video sequence generated from the first body of data, adjusting (100-300) the second body of data to give transmission priority to different units of the second body of data, according to the amount of detail (e.g. object/background) within the block of video data, a decoder (e.g. Fig. 4) capable of performing decoding operations on the first and second body of data, including variable length decoding (142, 143), inverse quantization (172, 173), inverse scanning (i.e. undoing the adjustment in Figs. 12 and 13), inverse discrete cosine transformation 210 or motion compensation (200, 201); and combining 181 the first body with the second body of data.

With respect to claims 3, 5, 10, 12, 16, 18, 22, and 24, Yamaguchi et al further discloses determining a detail by processing the data with a discrete cosine transform 100, the amount of detail corresponding to the coefficients of the higher-frequency terms (e.g. AC coefficients); and determining a transmission priority according to a frequency weighting matrix (Figs. 12 and 13).

With respect to claims 4, 11, 17, and 23, although Yamaguchi et al discloses the encoding and decoding system in accordance with the MPEG-2 standard, it is noted Yamaguchi et al does not particularly disclose any details of giving generally higher transmission priority to lower-frequency terms and generally lower transmission priority to higher-frequency terms from the standard. However, Examiner takes Official Notice that such feature is included in the MPEG-2 requirement.

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With respect to claims 6, 13, 19, and 25, Yamaguchi et al further discloses determining a transmission priority 120 according to an amount of data lost (i.e. prediction error) in the first body of data during the first body's generation (Base Layer).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boyce discloses method and apparatus for transmitting MPEG video over the InterNet.

10. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

(for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Or:

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington. VA., Sixth Floor (Receptionist).

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584.


Y. LEE
PRIMARY EXAMINER

Y. Lee/yl
May 16, 2003